RULES:
- when doing a move, you are only allowed to move one piece at a time
- a smaller piece is only allowed on top of a bigger piece
- a bigger piece is NOT allowed on top of a smaller piece

How many moves

With 3 parts

Moves: 1

Moves: 2

Moves: 3

Moves: 4

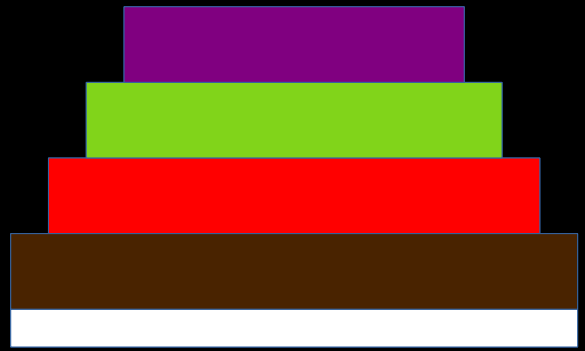
Moves: 5

Moves: 6

Moves: 7

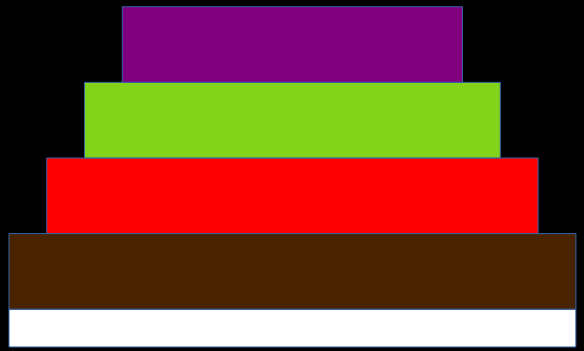
3 Parts → 7 Moves

RULES:
- when doing a move, you are only allowed to move one piece at a time
- a smaller piece is only allowed on top of a bigger piece
- a bigger piece is NOT allowed on top of a smaller piece



How many moves ?

With 4 parts



Moves: 1

Moves: 2

Moves: 3

Moves: 4

Moves: 5

Moves: 6

Moves: 7

Moves: 8

Moves: 9

Moves: 10

Moves: 11

Moves: 12

Moves: 13

Moves: 14

Moves: 15

With 4 Parts 15 moves are needed

$2^3 = 8 \rightarrow$ one more than the moves needed
$2^4 = 16 \rightarrow$ one more than the moves needed

Insight:

$2^x - 1$ = Moves for tower of Hanoi